Distortions of Sanctions on Myanmar's Trade: Evidences and Predictions from the Gravity model

Chapter 1

Introduction

The collapse of the socialist system in 1988 by the university students' democracy protests was expected to be the critical turning point of Myanmar's economy. Government's suppression to the protests, however, greatly induced the international pressure on Myanmar. Immediately, Japan, Germany, and the United States, three major aid providers, ceased development assistance under the reason of human right abuses by Myanmar government. In the meantime, new military government, looked forward to a modern developing country, introduced the market oriented economic system and enacted Foreign Investment Law in November 1988. Although the economy achieved some significant progress, the vulnerable political conditions between the opposition group and the military government triggered additional sanctions from the US and European governments year by year. Although the sanctions are regarded to punish the military government, the most affected group is only the average population.

The response of the new military government to the serious shortage of foreign currency due to the international aid ban was straightforward; exploiting and selling all of its natural resources to neighboring countries became the main source of foreign earning. In addition, the hostile international measures has been an obstacle for the US and European investors, deepening stagnation of the Myanmar economy. As a result, the ties with neighboring countries

strengthen which lead Myanmar to heavily rely on disproportionate trade pattern with Thailand and China who exploit natural resources of Myanmar unconditionally. Over the two decades, the combination of inefficient macroeconomic policies, impact of Asian financial crisis, and trade and investment sanctions greatly pushed Myanmar to be the impoverished country of the modern world.

The pattern and role of Myanmar trade, therefore, becomes an interesting question for achieving its economic take-off. A comprehensive structure of the Myanmar's economy and its comparative advantages should be expected to relocate its trade flows to non-neighboring developed and developing countries. In the release of the US trade and investment sanctions, specific composition of imports and exports would be channeled to the US, in the expectation of transferring high technology and touching the large US markets. Consequently, Myanmar's trade pattern could shift from highly resource-based to manufactured exports under which existing factors of production can be utilized efficiently. Moreover, the trade structure of the ASEAN countries might have a significant change by the diversifications of Myanmar's trade in the international markets. In addition, if Myanmar could maintain ODA (Official Development Assistance) from the US, the degree of exploiting Myanmar's natural resources could be reduced to some extent.

Since no studies have been done regarding the impact of sanctions on Myanmar's trade, this study investigates the distortions of sanctions on Myanmar's trade pattern. Firstly, whether Myanmar follows ASEAN trade pattern or not is analyzed. To do this, a simple econometric model is created by recognizing that ASEAN countries might have a particular trade structure since they all have a similar situation determined by location, endowment and access to foreign

markets. The estimated model reflects the ASEAN's trade pattern in terms of volume and partner composition; the situation which Myanmar should have. Then, whether Myanmar is far from that benchmark or not can be elaborated. Secondly, in what extent of Myanmar trade is distorted compared with that of its neighbors can be measured. Finally, under the free trade condition, how much of its trade volume could diverge to the US and other countries is simulated using predictions of the model for the 1994-1998, 1999-2003, and 2004-2008 periods.

The simple well-known econometric approach, the gravity model, is used in this study. A reduced-form equation in which the link between the volume of exports and imports to the level of countries' economic development and their distance is applied, including other influential variables such as free trade area and vicinity. It is the successful model in the sense that it can explain most of the variations in bilateral trade, and the estimated effects are economically and statistically reliable across studies although theoretical foundations of this model are not rigorous.

This study constitutes six parts. Chapter 2 presents Myanmar's major economic and social indicators for some selected years, types and status of sanctions, and trade compositions. Literature review is discussed in Chapter 3. Chapter 4 represents the applied econometric model, its limitations and the data organization. In Chapter 5, the estimation results are discussed followed by the simulation test for Myanmar's predicted trade and actual trade levels, using ASEAN trade patterns estimated by the model for three time periods. The conclusion is in the Chapter 6.

Chapter 2

Myanmar's stages of economic, social, trade compositions and sanctions

Myanmar was actually an "early starter" of economic development in Southeast Asia.

John Wong(1997)

Director of the Institute of East Asian Political Economy, Singapore.

US sanctions have not had any success in fostering greater democracy or improving the human rights situation in Myanmar. In fact, conditions worsened.

John J. Brandon (1999)

Asia Foundation

It may surprise some of the recent era that Myanmar was a leading economy in the South East Asia region and the world's top rice exporter until the early 1940s[1]. Possessing well-educated elite along with the rich and diverse natural resources such as timber, oil and precious stones, Myanmar had been regarded to be the most promising economy in the region after its independence in 1948. Not surprisingly, per capita income of Myanmar in 1950 was higher than that of Hong Kong, Korea, Malaysia and Thailand[2]. Four decades later, under the socialist regime, Myanmar became the least developed country status in 1987. After the collapse of the socialist system, the economy achieved some progress in the early 1990s; however, the vulnerable political conditions posed trade and investment sanctions from the Western countries. Needless to say, political mismanagement and poor economic strategies delayed its development for more than half of a century.

[1] Mya Than (1992)
[2] John Wong (1997)

After independence, overemphasizing industrialization to the relative neglect of agriculture combined with domestic insurgency encountered the slow rate of economic growth. Under the "Burmese Way to Socialism", after the military government took power in 1962, more determined to import-substitution industrialization and be as self-reliant, neglected to tap ODA or bilateral external assistance. During this period, Myanmar lost her position of the world first rice exporter. In order to entitle concessional foreign aid and a rescheduling of its external debt payments, in 1987, Myanmar was granted to be the least developed country status. The growth rate declined to -11.4 percent in 1988 mostly due to political upheavals in the country.

In spite of the introduction of open market economy and Foreign Investment Law in 1988, there were no considerable changes in terms of the economic and development vision. Also, there has been little change in the structure of the economy for more than two decades. Although government spending is not emphasized to stimulate the economy, government fiscal deficits are assumed to account for a large percent of GDP for every year[3] and these deficits are mostly financed by printing money. Kubo (2007) showed that the monetization of fiscal deficits causes chronic inflation. Moreover, Myanmar's domestic currency interest rate is determined by its Central Bank and has been unchanged until 2008 in the range of 10 to 12 percent; thereby it cannot contribute the market economy. Some economic indicators are described in Table 1. However, it is important to note that Myanmar's statistics cannot be fully relied to interpret the reality of its economy and people.

[3] For some year, data on government expenditure and budget are not published.

Table 1. Major economic indicators for some selected years

	1960	1970	1980	1990	2000	2005	2006	2007	2008
GDP (%)		2.55	3.59	-0.38	6.43	12.72	13.6	13.9	11.9
GDP Per Capita (%)				-4.03	3.81	10.66	13.6	10.8	11
Exports									
Imports									
Trade balance				-492	-823	464	1547	2266	3010
Current Account Balance				-527	-436	-9.4	444	1032	1803
Inflations				11.8	27.42	23.68	10.7	26.3	32.9
Total external debt				4673	5534	6114	6863	7303	7404
Foreign exchange reserve									
Foreign Direct Investment					308.2	179.8			

Sources: Asia Development Outlook, Statistical Year Books and Myat Thein, Economic Development of Myanmar (2001)

Under the socialist era, Myanmar could be said to be the country which met its basic needs[4]. Per capita GDP was US$ 220 in 1987; people were relatively equal in terms of income and access to education and health care. After two decades, it can be assumed that the quality of life for average population has no improvement; particularly the economic hardship of a large number of people is becoming more obvious. GDP per capita in 2008 is about US$479, which is only 2.5 percent of the per capita income of South Korea and 12 percent of that of Thailand.

[4] Mya Than (1984)

Recently, Myanmar's Human Development Index (HDI) rank is 132 out of 169 countries placing Myanmar below the regional average.

Table 2. Major social indicators for some selected years

	1960	1970	1980	1990	2000	2005	2006	2007	2008
Population (million)	22.2	n.a	34.8	40.8	49.13	54.3	55.4	56.52	57.5
Adult literacy (%)	60	71	70	78.6	89.8	89.8	89.8	89.8	89.8
Life expectancy at birth (years)	44	52.5	57.5	58.9	59.9	60.6	60.08	61.2	61.6
Infant mortality rate (per 1000)	129	n.a	101	120	107	101	n.a	103	98
HDI (Human Development Index)	n.a	n.a	n.a	n.a	0.58	0.406	0.419	0.432	0.438

Sources: UNDP, Statistical Year Book, 2004 and 2008, and Myat Thein, Economic Development of Myanmar (2001)

Until 1950s Myanmar enjoyed trade surplus as a result of colonial ties. After the closed-door policy was activated under the socialist regime, foreign trade became only a marginal activity in Myanmar. Foreign reserves reached the lowest level which was less than one month to import requirements in 1987. In the 1990s, there was a hope for Myanmar to exploit the dynamic comparative advantage of international trade. However, in the absence of political and macroeconomic stability, international transactions cannot survive longer in the country.

The numerous regulations on foreign exchange and trade in Myanmar lead to the existence of informal exchange rates and economic activities. The official rate has been set up at around 6 kyat per U.S. dollar for more than two decades; which is pegged to the special drawing right (SDR) of the International Monetary Fund (IMF). All export earnings of private sectors

must be deposited at state-owned banks. Private importers are not only shut off from official foreign reserves but also prohibited to import if they do not have any exporting earnings; which result in the emergence of unofficial parallel exchange rates. Therefore, market clearing exchange rates have depreciated around 1,185 kyat per US dollar in 2008.

Recently, Thailand, China, India and ASEAN are the largest trading partners. Myanmar's major import comprises consumer goods and capital goods, mostly machinery, transport equipments, and refined mineral oil. Major exports are natural gas and oil, wood products, pulses and beans, fish, rice, clothing, and gems. The current account deficits have been dissolved by natural gas revenue since 2002; however, under the government monopoly of gas exploration, this current account balance cannot bring an improvement for the economy. Regarding partner composition, it can be observed from the following table that Myanmar is increasingly trading with the Asian countries.

Table 3. Trade partner composition from 1960 to 2008 (%)

	1980s		1990s		2000s		2005s		2006		2007		2008	
	EX	IM	EX	IM	EX	IM	EX	IM	EX	IM	EX	IM	EX	IM
ASEAN	27	8	21	12	21	44	42	46	53	**47**	50	**45**	57	51
EU	13	21	9	24	11	7	13	3	7	**3**	7	**4**	4	2
CHINA	9	4	11	7	14	26	7	29	6	**36**	9	**35**	10	32
INDIA	1	1	3	0	12	1	11	3	15	**4**	15	**3**	12	3
JAPAN	10	44	8	35	7	8	4	4	5	**3**	6	**4**	4	3
US	0	5	1	5	12	1	7	0	0	**0**	0	**0**	0	0
REST	100	100	100	100	100	100	100	100	100	**100**	100	**100**	100	100

Sources: EIU, Statistical Year Books, Mya Than, Myanmar's External Trade (1992) and Myat Thein, Economic Development of Myanmar (2001)

Government's suppression to the democracy protests in 1988 was the starting point of international pressure on Myanmar. Japan, Germany, and the United States immediately ceased

ODA under the grounds that Myanmar government was violating basic human rights. The series of demonstrations since 1996 to the demand for justice, and handlings of the government to these actions have triggered different types of sanctions again and again. 2003 import sanctions by the US created negative impacts much more on the unskilled working force, especially young women. Because of these trade and investment sanctions, young people are moving abroad which leads Myanmar to be the lack of active labor force. Recently, the number of illegal migrant workers from Myanmar to neighboring Thailand is incredibly increasing. By taking advantage of sanctions on Myanmar, Thailand, China, and India have attempted to replace the trade and investment positions of the Western countries.

Major types and status of sanctions, and net ODA can be seen in Appendix. Unlike the US, Japan who accounted for almost 80 percent of Myanmar's ODA, frequently releases humanitarian assistance to Myanmar but maintains ban on new aids[5]. At the present, in spite of propose for sanctions along the 1990s, the pro-democracy groups are getting interested in lifting the sanctions for political and economic reasons. Nevertheless, the US strongly asserted that they will not lift the sanctions unless the Myanmar government takes the action on their core concern of events inside Myanmar[6]. At the moment, Myanmar has favorable preconditions for take-off such as natural resources, trading possibilities, and the potential Democracy from 2010 election. However, Myanmar's political stability is still posing the questions for its economic growth.

[5] New York Times, 26 June 2003.
[6] Kurt Campbell, US Assistant Secretary for East Asia.

Chapter 3

Literature Review

The gravity model has consistently proved to be a versatile tool in social sciences for more than forty years. It can explain the economic interactions between different locations especially in the study of trade volumes, capital flows, and labor migration by considering their distance from each other (Tinbergen, 1962; Voorhees, 1956; and William, 1929). The concept of the gravity model is simply derived from Isaac Newton's Law of universal gravitation. Intuitively, trade between countries is similar to the gravitational interaction between planets; the attraction force (total trade) is determined positively by their relative masses (economic size) and negatively by the distance between them (the transport cost). These initial specifications and the estimate of the determinants of trade flows are introduced by two seminal papers of Dutch economists, Tinbergen (1962) and Pöyhönen (1963); however, there is no sound theoretical background. Since then, the basic gravity model has been augmented by other economic factors such as the effect of trade agreements, common currency, and dissimilar factor endowments; and non-economic factors such as regional and cultural similarities, common institutions, common language, political factors, and other policy variables.

Despite the lack of a convincing micro-economic foundation, gravity models maintain its success since they have outperformed more sophisticated models in the estimations of trade flows. Some ambiguity, however, regarding its theoretical foundations motivated investigations into the original ad hoc specification. Many efforts have been made to confirm the connection between the model and trade theories. The earliest theoretical models, Linneman (1966), described that the gravity equation is matched with a reduced-form equation in which a partial

equilibrium model of export supply and import demand is derived. Anderson (1979) and Bergstrand (1985) develop more rigorous general equilibrium models to derive the gravity equation; however, some restrictive assumptions are required, such as identical preferences and production functions, perfect substitutability of goods in production and consumption, perfect arbitrage, and constant transportation costs. Later, a gravity equation has been derived from a general equilibrium model in which technological assumptions are relaxed and externalities are considered, Asilis and Rivera-Batiz (1994).

The trade flow of developing countries, mostly inter-industry trade with perfect competition, which is consistent with the Heckscher-Ohlin trade model of homogeneous goods can be explained by the gravity model, Hummels and Levinsohn (1995), Deardorff (1998), Evenett and Keller (2002). Deardorff (1984) found that the gravity model can also explain intra-industry trade which cannot be accommodated itself by the conventional factor endowment theory. Moreover, the results that the gravity model is more consistent with the differentiated product model with high shares of intra-industry trade under increasing returns and monopolistic competition is shown by Anderson (1979), Helpman and Krugman (1985) and Bergstrand (1985, 1989). Feenstra et al. (2001), however, shows that the derivation of the gravity equations from both differentiated and homogeneous goods lead to different estimation in key parameter values thereby these gravity equations pose different trade policy implications.

Among the applications of the gravity model, Montenegro and Soto (1996) investigated the degree of distortion by the US embargo on the Cuban trade structure and predicted its evolution under the free trade condition. The trade flows between 101 countries in the 1980-91 period is used to explore the distortion of trade. They found that 80 percent of Cuban exports and

imports would be expected to direct towards the USA from Canada and Japan to reduce transportation and transaction costs.

Regarding sanctions on Myanmar, Howse and Genser (2008) analyzed the European Union's sanction which can be regarded as a limited and targeted sanctions. They tried to argue that the additional trade sanctions against Myanmar by the EU could not violate the provision of the General Agreement on Tariff and Trade (GATT) that prohibit trade sanctions. Referring the WTO provisions and cases, they concluded that expending the mild sanctions could violate the WTO rules; however, these trade-restrictive measures could be justified compatible with the Article XX (a) exception as "necessary to protect public morals," under the ground on Myanmar military government human right abuse.

Relatively few studies have been done for Myanmar's international trade. Nu Nu Lwin (2009) analyzed the trade patterns of CLM (Cambodia, Laos, and Myanmar) countries applying the gravity model from 1998 to 2007. She found that CLM's trade patterns are mainly affected by partner country's GDP, the difference between per capita GDPs of two countries, distances, common border, and presence in particular FTA. She considered trade sanctions as one dummy variable which showed the significant negative effect on bilateral trade flows between Myanmar and the sanctioned countries. This study emphasizes the distortion of Myanmar's trade by the US and European sanctions; which can be expected as a fulfillment to the requirements of the studies on Myanmar's economic welfare.

Chapter 4

Methodology and Data

To estimate the pattern of ASEAN's trade, this study follows the standard gravity model in which trade between two countries can be modeled as in equation (1), where i represents the reporter country and j corresponds to the partner country, Montenegro and Soto (1996):

$$M_i^j, X_i^j = Ø\,(TP^i, TP^j, TC^{ij}, SF^{ij}) \quad (1)$$

where M_i^j is non-fuel imports of the reporter i from partner j, and X_i^j represents non-feul exports of the reporter i to partner j. Trade potentials (TP^i, TP^j) can be explained by the size of the economy (e.g. GDP), its degree of development (e.g. per capita income) and population or physical area. In addition to transport costs (TC^{ij}), specific factors (SF^{ij}) can be considered to affect bilateral trade volumes; such as either a reporter or a partner being a member in special trade areas, or being a landlocked, and neighbors to each other.

The econometric equation of augmented gravity model in this study is as follows:

$$Ln(M_i^j/X_i^j)=\beta_0+\beta_1 ln(GDP^j)+\beta_2 ln(PGDP^j)+\beta_3 ln(Distance_i^j)+\beta_4 ln(Linder^{ij})+\beta_5 ASEAN^{ij}$$

$$+\beta_6 Landlocked^{ij}+\beta_7 Border^{ij} \quad (2)$$

where GDP and PGDP are the annual GDP and per capita GDP of the partner country in US dollar; Distance is the distance between ASEAN and partner countries in nautical miles which is a proxy of transport cost. Linder is the absolute difference of per capita GDPs in US dollar between ASEAN and partner countries; countries with similar level of per capita income are

producing and consuming similar goods, thus trade between them is much more than trade between those whose economies differ in size and structure, Linder (1961). ASEAN, Landlocked, and Border are dummy variables taking value 1 if the partner is a member of ASEAN, a landlocked, and sharing a common border with the reporter.

Regarding the signs of the coefficient to the variables, a positive sign is expected in GDP as trade will increase with GDP of the partner countries; this sign is also expected in trade agreements (ASEAN) and vicinity (Border) as well. On the coefficient of per capita GDP, Bergstrand (1989; as cited in Montenegro and Soto, 1996) suggests that signs are ambiguous: exporter per capita GDP should have a positive (negative) effect if the trade composition is capita (labor) intensive in production. Importer's per capita GDP should have a positive (negative) effect if the trade composition is on luxury (necessity) goods in consumption. Since ASEAN has a relative abundance of labor and a lower consumption pattern compared to most market economies, the sign of per capita GDP is expected to be negative. Similarly, a negative distance parameter is expected in the sense that transportation costs always indicate the adverse effect.

According to Linder, if countries trade more when their economies differ, their trade is based on comparative advantage, if so a positive sign in Linder is expected. By contrast, while countries trade more when their economies are similar, their trade is based on differentiated products; a negative sign is expected. As ASEAN's trade is mostly determined by comparative advantage, the sign should be positive. In the landlocked case, sings can be positive or negative; it depends on whether ASEAN countries are trading with landlocked countries or not.

The default regression method is the Tobit model. However, the ordinary least square (OLS) estimators with robust standard errors, random effects and fixed effects estimators (since the data sets are panel) are obtained for comparison among regressions. In fact OLS techniques are inappropriate in the case when zero values are common in bilateral trade data. Silva and Tenreyro (2006) raised concerns about the biasness and the problems caused by the zero values of the dependent variables. Left-censoring problems arise by using OLS thereby parameters are inconsistent if the dependent variable is censored. Some researchers utilize alternative procedures, such as simply eliminate zeros in the dependent variable (e.g. Brada and Mendez, 1985) or replace them by arbitrary small values (Anderson and Wincoop, 2003 and Butt, 2008; as cited in Orgilbold 2010), which also tend to bias the results. Using fixed effects may drop some important variables, and random effects have the same problems like OLS.

Thus, in order to control for left-censoring problem, the Tobit model is employed both in the estimation procedure and for the simulation test. Using Tobit model has another advantage that a maximum likelihood technique creates completely reliable parameters, even for the small sample size (Sen and Matuszewski, 1991). In this study, large samples (between 1,275 and 10,200 observations) save the significance of the regression estimations. In addition, logarithmic specifications in all variables except dummy variables are applied[7], which also explains a direct measure of the elasticities, Sanso et al. (1993). One-year lagged variables for export and import are also taken in order to avoid endogenity problem between GDP and trade.

Although the gravity model is successful in some senses, researchers acknowledge that because of the weak theoretical foundation, the interpretation of the results may be less precise

[7] Firstly, zero value are changed to 1 and then taken log value. Thus these zero values do not necessarily change to undefined values when taking log form.

than one's expectation. Moreover, this simple gravity model may ignore some potential influential factors such as countries' natural resources endowment. At the data level, physical distance can represent only how far they are, and not the accurate trading distances between countries as noted by Geraci and Prewo (1977), and Balassa and Noland (1988).

This study uses panel data of bilateral trade flows between eight ASEAN countries (reporters) and their 85 main trading partners covering 15 years from 1994 to 2008. The trade data come from the Direction of Trade Statistics (DOTS) of IMF in US million dollars (current values). GDP and per capita GDP in US dollars (current prices) have been obtained from the World Economic Outlook Database 2010 of IMF. The transportation distances, grate-circle distances between eight ASEAN countries and their trading partners, are obtained from timeanddate.com. For some cases, instead of using capital cities simply, the nearest ports of partner countries from ASEAN countries are chosen[8]. ASEAN, landlocked and border dummy variables are from Wikipedia.com. There are three main data sets applied in this study, overall data sets with Myanmar and without Myanmar, and separate data sets for eight ASEAN countries. The reason for using the data set without Myanmar is to elaborate the simulation test for Myanmar's trade pattern.

[8] If one port city has smaller distance than capital city, but difference is small, the capital city is simply used. In Vietnam case two ports are used for taking distances: Ho Chi Minh City and Hanoi since the distance itself between these cities is over 600 nautical miles. Thus Ho Chi Minh City is used as a starting point for Southern countries of Vietnam and Hanoi for Northern countries ofit.

Chapter 5

5.1 Empirical Results

In the estimation process with a total of 85 partners for each country, Singapore and Brunei are excluded as countries with special circumstances usually distort the trade patterns. Presuming the effects of different fundamentals, exports and imports are estimated separately instead of total trade with every partner. Since this study deals with panel data, all the results from the pooled OLS with robust, random effects and fixed effects, and Tobit regressions are displayed. Particularly, the default regression is the Tobit method which proves the benchmark results. There are three main regression results: 1) ASEAN's estimated pattern of exports and imports excluding Myanmar (each regression has 8,925 observations) and including Myanmar (each regression has 10,200 observations); 2) three periods (five-year each) estimations of ASEAN's exports and imports without Myanmar (2,975 observations) and with Myanmar (3,400 observations); and 3) separate regressions for each of eight ASEAN countries (1,275 observations for each). Lists of eight ASEAN countries and 85 partners are in Appendix.

The estimated regressions for exports and imports of seven ASEAN countries for fifteen years data are presented in Table 4. In general (Tobit), all parameters have expected signs at the conventional levels of significant. Apart from distance coefficient, all estimated values of other variables in both exports and imports regressions are similar in magnitudes. Presumably, ASEAN countries trade is increased by the GDP of their partner countries. The sign of the per

Table 4. Regression Results on ASEAN's exports and imports with overall data excluding Myanmar

	OLS Model		**Panel – Fixed Effect Model**		**Panel – Random Effect Model**		**Tobit Model**	
	Exports	Imports	Exports	Imports	Exports	Imports	**Exports**	**Imports**
Variables	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	**Coef.**	**Coef.**
Ln(GDP)	1.33***	1.49***	-0.24	-0.03	1.35***	1.43***	**1.51*** **	**1.74*** **
	[27.66]	[30.39]	[-0.24]	[-0.03]	[13.03]	[11.47]	**[25.56]**	**[27.21]**
Ln(PGDP)	-0.82***	-0.64***	1.04	0.25	-0.85***	-0.78***	**-0.97*** **	**-0.85*** **
	[-9.42]	[-7.24]	[0.90]	[0.22]	[-6.11]	[-4.86]	**[-8.82]**	**[-7.12]**
Ln(Distance)	-0.48***	-1.20***	1.81***	1.92***	0.38**	0.23	**-0.50*** **	**-1.36*** **
	[-3.97]	[-9.68]	[6.68]	[6.93]	[2.02]	[1.15]	**[-3.45]**	**[-8.64]**
Ln(Linder)	0.94***	0.90***	0.84***	0.70***	0.92***	0.81***	**1.13*** **	**1.17*** **
	[13.06]	[12.29]	[11.36]	[9.29]	[12.58]	[10.76]	**[13.12]**	**[12.51]**
ASEAN-dummy	2.04***	1.73***	2.00**	1.51*	3.28***	3.26***	**2.40*** **	**2.11*** **
	[6.50]	[5.73]	[2.37]	[1.76]	[6.53]	[5.88]	**[6.24]**	**[5.09]**
Landlocked-dummy	1.05***	0.95***	-	-	1.16	1.13	**1.37*** **	**1.29*** **
	[3.89]	[3.11]			[1.60]	[1.30]	**[3.41]**	**[2.96]**
Border-dummy	1.56***	1.37***	2.54***	3.26***	1.86***	2.32***	**1.68*** **	**1.56*** **
	[3.71]	[3.46]	[5.20]	[6.53]	[3.95]	[4.78]	**[3.17]**	**[2.72]**
Constant	-16.35***	-16.19***	-10.44	-9.60	-23.58***	-24.71***	**-21.54*** **	**-22.61*** **
	[-10.91]	[-10.36]	[-0.66]	[-0.59]	[-8.96]	[-8.21]	**[-11.98]**	**[-11.61]**
R^2	0.16	0.20						
Number of observations	8743	8739	8743	8739	8743	8739	**8743**	**8739**

*Note: *, **, *** indicate significance at the 10%, 5%, and 1% level respectively.*
Numbers in [ ] are t-statistics and z-statistics.

capita GDP is as expected; a negative parameter implies that ASEAN's trade compositions is labor intensive in production and necessities goods in consumption, suggested by Bergstrand (1989). The positive sign of the Linder confirms that ASEAN's trade is determined by comparative advantage and a different composition of goods when they trade with the countries of different economic sizes.

The large absolute value of the coefficient of distance on imports than that of exports explains that ASEAN countries can minimize the costs of exports under the export-oriented strategies. The large parameter value of ASEAN dummy also indicates that trade agreement among ASEAN is the important determinant of the intra-regional trade. According to the positive sign of the landlocked, ASEAN countries are trading with landlocked countries as most of ASEAN are on the mainland of the South East Asia. Parameter of border confirms the regularities that they tend to trade among themselves more than the rest of the world. However, there is a surprising result that the border coefficient becomes smaller and less significant in exports and not significant at all in imports when Myanmar is included in the estimation as shown in Table 5. The reason might come from the fact that trade between Myanmar and its neighbors, Bangladesh and Lao PDR, are relatively small[9].

[9] No trade volume with Lao PDR is found during the period of study. Myanmar government frequently closes the border gates and trade with Thailand, Bangladesh, and China due to refugee crises.

Table 5. Regression Results on ASEAN's exports and imports with overall data including Myanmar

	OLS Model		**Panel – Fixed Effect Model**		**Panel – Random Effect Model**		**Tobit Model**	
	Exports	Imports	Exports	Imports	Exports	Imports	**Exports**	**Imports**
Variables	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	**Coef.**	**Coef.**
Ln(GDP)	1.36***	1.58***	-0.70	-0.77	1.37***	1.46***	**1.56*** **	**1.90*** **
	[30.02]	[33.74]	[-0.75]	[-0.79]	[12.56]	[11.31]	**[27.61]**	**[30.32]**
Ln(PGDP)	-0.72***	-0.62***	1.64	1.09	-0.75***	-0.77***	**-0.86*** **	**-0.84*** **
	[-8.12]	[-6.77]	[1.51]	[0.97]	[-5.15]	[-4.64]	**[-7.82]**	**[-6.90]**
Ln(Distance)	-0.65***	-1.21***	2.11***	2.46***	0.55***	0.67***	**-0.72*** **	**-1.40*** **
	[-5.63]	[-9.86]	[8.34]	[9.44]	[3.03]	[3.36]	**[-5.14]**	**[-9.05]**
Ln(Linder)	0.91***	0.84***	0.76***	0.58***	0.85***	0.69***	**1.11*** **	**1.13*** **
	[12.21]	[11.09]	[10.45]	[7.62]	[11.78]	[9.24]	**[12.71]**	**[11.65]**
ASEAN-dummy	2.03***	2.09***	1.66**	1.52*	3.44***	3.72***	**2.40*** **	**2.57*** **
	[7.22]	[7.41]	[2.08]	[1.86]	[6.96]	[6.83]	**[6.65]**	**[6.48]**
Landlocked-dummy	0.79***	0.94***	-	-	0.91	1.17	**1.07*** **	**1.32*** **
	[2.99]	[3.20]			[1.20]	[1.28]	**[2.79]**	**[3.10]**
Border-dummy	1.12***	0.76**	2.70***	3.17***	1.90***	2.19***	**1.17** **	*0.85*
	[2.95]	[2.01]	[6.12]	[6.98]	[4.44]	[4.91]	**[2.40]**	**[1.58]**
Constant	-16.59***	-18.78***	-6.09	-1.95	-26.26***	-28.92***	**-22.25*** **	**-26.74*** **
	[-11.73]	[-12.46]	[-0.41]	[-0.13]	[-9.87]	[-9.53]	**[-13.02]**	**[-14.12]**
R^2	0.17	0.20						
Number of observations	9973	9899	9973	9899	9973	9899	**9973**	**9899**

*Note: *, **, *** indicate significance at the 10%, 5%, and 1% level respectively.*
Numbers in [ ] are t-statistics and z-statistics.

Table 6 provides the estimated Tobit regressions of exports and imports of seven ASEAN countries for three periods (1994-98, 1999-2003, and 2004-08). The estimations of the three period models are basically similar to that of the overall model in terms of the signs, showing that ASEAN countries trade pattern was not affected by 1997 Asian financial crisis. Some parameters become insignificant and these non-significances reflect the minor fluctuations of the trade pattern along time periods.

The fluctuated nature of the coefficient values of per capita GDP cannot capture the industrialization of the ASEAN countries in the sense that if ASEAN's industrialization level becomes higher, the parameter values of trading with the developed countries (PGDP) must become smaller with the negative signs along the periods. The transportation costs of ASEAN's exports are reducing but the opposite case is in imports confirming that they are maintaining the export-oriented strategies in three-period models. The coefficients of ASEAN dummy is getting larger in magnitudes in the second and third periods at the highly significant level; which is the result of the membership of Myanmar, Laos, and Cambodia into ASEAN after 1997.

For the time being, ASEAN countries tend to trade less with the landlocked countries according to three periods values of landlocked parameters. Though it is statistically insignificant, border coefficient has large differences in absolute terms among three periods, reflecting the situation of intra-regional trade instability by the border crises between Thailand and three countries (Malaysia, Cambodia, and Myanmar)[10]. By including Myanmar in the estimations as shown in Table 7, the distinctive finding is that ASEAN dummy for imports in

[10] Thai-Cambodian border crisis began in 2008. A major clash occurred in 2001 between Myanmar and Thailand. Since 2001, an ethnic insurgency is taking place in southern Thailand, the border provinces with Malaysia. Those crises can be regarded as the source of distortions of trade between these countries.

third period becomes relatively large indicating that Myanmar is heavily dependent on the imports from ASEAN rather than other developed countries of the World.

Table 6. Three Periods Regression Results on ASEAN's exports and imports with overall data excluding Myanmar, Tobit Model

	Period1 (1994-1998)		**Period2 (1999-2003)**		**Period3 (2004-2008)**	
	Exports	Imports	Exports	Imports	Exports	Imports
Variables	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
Ln(GDP)	1.17***	1.40***	1.46***	1.80***	1.89***	2.04***
	[9.75]	[10.95]	[15.59]	[18.15]	[19.57]	[19.22]
Ln(PGDP)	-0.91***	-0.90***	-0.74***	-0.73***	-1.29***	-0.79***
	[-4.31]	[-3.98]	[-4.25]	[-3.82]	[-6.84]	[-3.82]
Ln(Distance)	-0.70***	-1.14***	-0.44*	-1.50***	***-0.34***	-1.57***
	[-2.72]	[-4.17]	[-1.74]	[-5.51]	[-1.31]	[-5.48]
Ln(Linder)	1.26***	1.35***	0.92***	0.95***	1.26***	1.15***
	[7.63]	[7.67]	[6.81]	[6.42]	[8.46]	[7.01]
ASEAN-dummy	1.43*	***1.29***	2.74***	2.12***	2.93***	2.84***
	[1.85]	[1.58]	[4.40]	[3.14]	[4.53]	[4.00]
Landlocked-dummy	1.47*	2.06**	1.30**	***0.81***	1.28**	***1.00***
	[1.78]	[2.31]	[2.10]	[1.21]	[2.00]	[1.41]
Border-dummy	***1.30***	2.04*	1.47*	***0.88***	2.15**	***1.40***
	[1.22]	[1.81]	[1.77]	[0.98]	[2.50]	[1.49]
Constant	-13.91***	-17.59***	-20.25***	-21.58***	-30.85***	-29.27***
	[-4.20]	[-5.00]	[-6.72]	[-6.58]	[-9.64]	[-8.31]
Number of observations	2869	2869	2934	2930	2940	2940

*Note: *, **, *** indicate significance at the 10%, 5%, and 1% level respectively.*
Numbers in [ ] are t-statistics.

Table 7. Three Periods Regression Results on ASEAN's exports and imports with overall data including Myanmar, Tobit Model

	Period1 (1994-1998)		**Period2 (1999-2003)**		**Period3 (2004-2008)**	
	Exports	Imports	Exports	Imports	Exports	Imports
Variables	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
Ln(GDP)	1.24***	1.52***	1.54***	1.99***	1.89***	2.23***
	[10.93]	[12.29]	[17.37]	[20.26]	[20.44]	[21.34]
Ln(PGDP)	-0.84***	-0.91***	-0.61***	-0.66***	-1.12***	-0.75***
	[-4.04]	[-4.00]	[-3.46]	[-3.40]	[-5.91]	[-3.54]
Ln(Distance)	-0.77***	-1.13***	-0.64***	-1.62***	-0.79***	-1.59***
	[-3.16]	[-4.25]	[-2.62]	[-6.01]	[-3.13]	[-5.61]
Ln(Linder)	1.26***	1.33***	0.86***	0.88***	1.23***	1.06***
	[7.61]	[7.42]	[6.17]	[5.71]	[8.15]	[6.26]
ASEAN-dummy	1.46**	1.58**	2.85***	2.47***	2.68***	***3.56******
	[2.03]	[2.03]	[4.83]	[3.81]	[4.42]	[5.24]
Landlocked-dummy	***1.10***	1.93**	1.12*	***0.86***	***0.93***	***1.12***
	[1.41]	[2.26]	[1.87]	[1.30]	[1.52]	[1.62]
Border-dummy	***1.00***	***0.94***	***0.92***	***0.30***	1.44*	***0.93***
	[1.03]	[0.90]	[1.19]	[0.35]	[1.81]	[1.05]
Constant	-16.04***	-21.10***	-21.74***	-25.88***	-29.04***	-34.32***
	[-5.17]	[-6.24]	[-7.48]	[-8.04]	[-9.50]	[-9.97]
Number of observations	3269	3241	3349	3323	3355	3335

*Note: *, **, *** indicate significance at the 10%, 5%, and 1% level respectively.*
Numbers in [ ] are t-statistics.

To observe the different trade patterns among eight ASEAN countries, Tobit regressions of each country for fifteen years are run and presented in Table 8. Generally, all countries are common in signs of GDP and distance variables. Regarding per capita GDP, Indonesia, Thailand, and Myanmar have the negative signs implying that they are mostly trading with countries of similar economic size; however, the opposite case reflects in Cambodia, Laos and Philippines along with the positive signs. Malaysia and Vietnam are slightly different from the formers; they have negative signs in exports and positive signs in imports indicating that they tend to export to developed countries and import from developing countries.

In the case of Linder, Indonesia, Malaysia, Myanmar, Philippines and Thailand have the positive signs showing that their trades are based on comparative advantage. Cambodia and Laos have the negative signs implying that they are trading similar goods with the countries of equal economic sizes; Vietnam has a negative sing in exports only. Distance variables are estimated with relatively large coefficients for Myanmar, Cambodia and Laos reflecting that their trading costs are higher than other ASEAN countries' costs (trade concentrates on nearer partners). Cambodia, Laos, Philippines, Thailand and Vietnam are strong in the intra-regional trade as their ASEAN dummy is positive; Indonesia has negative sign but the absolute value is small and non-significant. Malaysia and Myanmar's exports to regional countries are negative, meaning that they tend to export non-ASEAN countries; however, Myanmar's import from ASEAN is significant and large which is consistent with the previous finding in overall regression.

Island countries of Indonesia, Malaysia and Philippines rarely trade with the landlocked countries as their landlocked signs are negative and quite significant. In the presence of border crisis, Myanmar, Thailand, and Cambodia have negative signs in border parameters. The fact

that Laos is only the landlocked country of ASEAN is proved by the gravity model with the largest parameter value of its border dummy. Since Philippines is island country, the border variable is dropped automatically. In overall, trade patterns of Indonesia, Malaysia, Philippines and Thailand have much in common; Cambodia and Laos are similar; and Myanmar and Vietnam are separately different from these two groups.

Table 8. Regression Results on eight ASEAN countries' exports and imports, Tobit Model

	Cambodia		Indonesia		Laos		Malaysia		Myanmar		Philippines		Thailand		Vietn
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
Variables	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
Ln(GDP)	2.92***	3.49***	1.01***	1.19***	3.20***	4.25***	0.89***	1.09***	1.96***	3.75***	1.09***	1.31***	0.77***	0.85***	2.11***
	[14.79]	[15.83]	[17.20]	[16.43]	[13.73]	[15.21]	[17.63]	[16.98]	[12.46]	[18.25]	[12.69]	[11.51]	[13.57]	[13.85]	[16.70]
Ln(PGDP)	3.27***	1.40*	-0.53***	-0.40**	3.64***	2.74***	-0.18***	0.06	-1.95	-0.29	0.55***	0.44*	-0.32***	-0.13	-0.02
	[4.46]	[1.73]	[-4.08]	[-2.46]	[4.82]	[3.05]	[-2.66]	[0.69]	[-1.54]	[-0.18]	[2.92]	[1.80]	[-3.60]	[-1.33]	[-0.04]
Ln(Distance)	-2.80***	-5.11***	-1.21***	-1.47***	-0.78	-4.51***	-0.97***	-0.97***	-3.96***	-4.57***	-1.04***	-1.29***	-0.39***	-0.81***	-0.68**
	[-5.87]	[-9.67]	[-7.18]	[-7.07]	[-1.41]	[-6.87]	[-7.23]	[-5.69]	[-9.21]	[-8.30]	[-4.89]	[-4.60]	[-2.75]	[-5.29]	[-2.19]
Ln(Linder)	-1.49***	-0.10	0.21**	0.28**	-1.56***	-1.13*	0.14**	0.17*	2.85**	0.47	0.09	0.26	0.33***	0.40***	-0.24
	[-2.63]	[-0.16]	[2.01]	[2.17]	[-2.80]	[-1.67]	[2.05]	[1.94]	[2.50]	[0.33]	[0.56]	[1.32]	[4.38]	[4.90]	[-0.75]
ASEAN-dummy	3.27**	2.91**	-0.33	-0.60	3.60***	5.09***	-0.15	0.66	-0.08	2.39**	2.03***	0.88	1.76***	1.20***	3.07***
	[2.50]	[2.05]	[-0.82]	[-1.23]	[2.66]	[3.44]	[-0.36]	[1.25]	[-0.09]	[2.18]	[3.86]	[1.27]	[4.64]	[2.95]	[3.60]
Landlocked-dummy	2.90**	3.53**	**-0.73***	**-0.14**	2.62*	3.17*	**-0.31**	**-0.09**	**-1.15**	2.59**	**-0.77**	**-2.26*****	0.87**	0.46	3.52***
	[2.24]	[2.50]	[-1.87]	[-0.28]	[1.68]	[1.72]	[-0.90]	[-0.20]	[-1.12]	[2.10]	[-1.34]	[-2.95]	[2.21]	[1.09]	[3.97]
Border-dummy	3.51*	**-1.09**	0.79	1.68**	7.36***	4.33**	1.29***	0.57	**-1.45**	**-4.97*****	-	-	**-1.25****	**-0.85**	1.77
	[1.91]	[-0.55]	[1.41]	[2.41]	[4.26]	[2.29]	[2.64]	[0.92]	[-1.21]	[-3.42]			[-2.50]	[-1.59]	[1.45]
Constant	-62.28***	-54.46***	5.79***	0.59	-91.27***	-86.95***	4.39***	-3.84*	-14.79***	-52.61***	-8.86***	-12.93***	2.32	1.08	-32.00***
	[-9.70]	[-7.79]	[3.00]	[0.25]	[-12.22]	[-10.07]	[2.67]	[-1.85]	[-2.95]	[-8.32]	[-3.28]	[-3.63]	[1.31]	[0.57]	[-7.93]
Number of observations	1232	1232	1256	1256	1238	1237	1255	1255	1230	1160	1254	1254	1254	1252	1254

*Note: *, **, *** indicate significance at the 10%, 5%, and 1% level respectively.*
Numbers in [] are t-statistics.

5.2 Simulation Results

To simulate the trade volume of Myanmar with its potential partners under the liberalization of trade, the estimated parameters from three periods regressions presented in Table 6 are used. The predicted exports and imports for selected regional blocks and individual countries are shown in Table 9. As expected, the most important result of the simulation is that exports and imports share of the US are significantly increased in the free trade; in response to the large domestic demand of US and the level of industrialization of Myanmar. This is the most desirable result that Myanmar should have as a long-run trade pattern after the sanction is lifted. Surprisingly, the predictions say that there is also a large increase in trade share of Japan in the free trade condition, although Myanmar is not imposed trade sanction by Japan. The criticism and responses of Japan on Myanmar's political mismanagement might be the reason for lower actual trade volume.

The increase in the share of the USA and Japan, which become more powerful trade partners, will replace the shares of Myanmar's neighboring countries, including Thailand, India, and ASEAN which reduce their participation to a range between 8 to 40 percent of total trade. The US and Japan are good examples of the role of industrialization in trade patterns; since by economic sizes and degrees of industrialization they greatly differ from the ASEAN and India, much of the expansion in their shares will contribute to the higher stage of industrialization in Myanmar. It is worth noting, however, that this result is conditional for the heterogeneous goods (capital goods for industrialization); under homogeneous goods, it is possible that close substitutes might offset large transportation costs.

Table 9. Myanmar: actual and predicted structure of trade (%)

Trade Partner	Predicted	Actual Level	Predicted	Actual Level
	Exports (1994-1998)		**Imports (1994-1998)**	
ASEAN(excluding Thailand)	2.4	9.5	1.1	17.7
EU	19.5	11.0	12.7	7.4
SAARC(excluding INDIA)	0.2	2.7	0.1	0.3
CHINA	4.4	11.0	6.8	25.1
INDIA	1.3	15.7	1.6	1.7
JAPAN	25.9	9.0	30.9	8.4
THAILAND	11.6	1.4	21.5	4.4
USA	***21.6***	***11.2***	***17.8***	***1.1***
Rest of the World	13.1	28.5	7.5	33.9
Total	100	100	100	100
	Exports (1999-2003)		**Imports (1999-2003)**	
ASEAN(excluding Thailand)	3.2	4.6	1.6	11.5
EU	12.0	16.6	6.8	3.7
SAARC(excluding INDIA)	0.1	1.7	0.1	0.2
CHINA	9.3	5.9	12.0	24.8
INDIA	1.5	11.5	1.5	2.4
JAPAN	17.4	5.1	31.0	6.6
THAILAND	9.7	26.8	11.6	16.5
USA	***40.0***	***17.0***	***31.2***	***0.5***
Rest of the World	6.8	10.8	4.2	33.8
Total	100	100	100	100
	Exports (2004-2008)		**Imports (2004-2008)**	
ASEAN(excluding Thailand)	1.8	4.8	1.7	9.7
EU	6.9	8.2	5.7	3.3
SAARC(excluding INDIA)	0.0	2.0	0.0	0.2
CHINA	33.1	7.7	27.1	32.6
INDIA	2.7	14.5	1.5	3.5
JAPAN	7.3	5.4	15.0	3.2
THAILAND	6.9	50.6	18.9	21.0
USA	***38.0***	***2.4***	***27.0***	***0.2***
Rest of the World	3.3	4.4	3.1	26.3
Total	100	100	100	100

Another significant prediction is that Myanmar's export to China can increase taking advantage of the growing domestic demand of China. On the other hand, predictions of the trade shares of EU show no distinctive results particularly; it is consistent with the assertion that their sanctions are limited and targeted sanctions. Of course, EU sanctions are directing only to the military government such as visa bans on senior military officials and bans on purchase of military equipments.

The prediction results are impressive and desirable; however, the reordering of trade is also important for other ASEAN and non-ASEAN countries. Not only exports of Myanmar to the US, Japan, and China should increase at the expenses of the reshuffling of exports from other developing countries; but also Myanmar imports from ASEAN, China, and Thailand should decrease to around 8, 5, and 2 percent respectively.

All in all, the trade structure of other ASEAN countries can be posed a threat by the diversifications of Myanmar's trade. In the event that Myanmar was released from the trade sanctions and barriers in international markets, and since Myanmar is possessing similar comparative advantages with ASEAN countries; the major exports (rice, rubber, natural gas, and other consumer goods) of ASEAN would face increased competition and the exporters of US, Japan, and China will neglect the transport costs. From the opening of the Myanmar economy, imports from the ASEAN countries would probably reduce suggested by the simulated pattern of Myanmar's imports. There appears to be a situation in which other ASEAN countries would share their benefit to Myanmar to considerable extent.

Chapter 6

Conclusions

This study researches on an econometric elaboration of Myanmar's trade structure and its prospects towards integration into the international markets. After the collapse of the socialist system in 1988, new military government introduced the market oriented economic system and enacted Foreign Investment Law. The economy achieved some significant progress within a few years; however, the vulnerable political conditions between the opposition group and the military government triggered additional sanctions from US and EU year by year. In addition, the hostile international pressures have been obstacles for the US and European investors; the strong ties with neighboring countries resulted which led Myanmar to heavily rely on disproportionate trade and investment patterns with Thailand, China, and ASEAN. The distortions on the preconditions for take-off by the above situations seriously affected the economic and trade structures in which Myanmar enjoyed favorable treatment in the form of ODA, FDI and potential export volumes.

The standard gravity model, with panel data of the period from 1994 to 2008 and econometric tool of Tobit, is employed to explore the trade structure that Myanmar economy would continue under the liberalization of trade. A comprehensive structure of the Myanmar's economy and its comparative advantages would relocate its trade flows to non-neighboring developed and developing countries. In the release of the US trade and investment sanctions, specific composition of imports and exports could be channeled to the US, in the expectation of transferring high technology and touching the large US markets. Consequently, Myanmar's trade pattern could shift from highly resource-based to manufactured exports under which existing

factors of production can be utilized efficiently. Moreover, the trade structure of the ASEAN countries will have an important change by the diversifications of Myanmar's trade in the international markets; ASEAN's trade benefits would decrease to some extent with increased export competition and reduced imports demand from Myanmar.

The estimated models show many evidences that ASEAN economies share similar determinants of trade pattern, though they have some differences to reflect their particular endowments and location. Nevertheless, predictions for both exports and imports from three-period models confirm the general results, and reveal the crucial role to trade not only with the US but also with Japan. Unless the US sanction is removed and Myanmar political condition is stable, Myanmar will continue to experience distorted trade structures and suffer from the lack of the most developed countries' assistance in the form of trade, investment, and ODA.

The implication of the gravity model has a caution. Although the ability of the gravity model to predict trade patterns is strong; in general these trade patterns do not conform to theoretical predictions. These deviations may come from the effects of other extra-economic or non-economic factors which have significant impacts on trade patterns; for example, Myanmar's political ties with China and Thailand's level of industrialization with its great demand for energy from Myanmar can maintain their trade shares at levels higher than predicted for the long-run. Additionally, increase shares of predicted trade with the US and Japan, specifically agricultural exports, cannot be perfectly operated since their agricultural goods market is protected by import quotas.

Comparing the predictions of trade volumes among three periods, it may surprise some that Myanmar has increasingly emphasized more abnormal trade with nearer few partners; it

seems a call for the policy implications. However, unlike other countries, Myanmar's trade composition and pattern may not be reshaped by any economic policies; the only requirement is the decisive feature of political condition.

Asian countries experiences of achieving take-off can be applied as the role strategies for Myanmar to escape from deep stagnation. After 1961 military coup by President Park Chung Hee, South Korea was able to achieve the tremendous economic performance. Likewise, although the elected Singapore's Prime Minister Lee Kuan Yew has been regarded as an authoritarian, Singapore is well known for its successful economic growth. It is worth nothing that economic performance of nations is not solely dependent on their political structures. No matter how South Korea and Singapore developed under the generous American economic aids in their early phase of industrialization, the mainspring for the successes of these authoritarian regimes is that they could create the general consensus of economic development among their own people and interest groups. Although it is more easily said than done, Myanmar must have "political commitment to development" along with the quality of leadership which is able to create the social cohesion and political stability essential to achieve sustained economic growth.